XXIII Congresso Brasileiro de ENTOMOLOGIA
NATAL / RN - 26 A 30 DE SETEMBRO DE 2010

EXTRACTS AND FRACTIONS OF CERRADO PLANTS ARE SELECTIVE FOR THE PARASITOID *PALMISTICHUS ELAEISIS* DELVARE & LA SALLE, 1993 (HYMENOPTERA: EULOPHIDAE)

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Palmistichus elaeisis Delvare & La Salle, 1993 (Hymenoptera: Eulophidae) is an important parasitoid of agricultural and forest pests and, therefore, botanical extracts should be selective for this insect. The aim of this study was to evaluate the reproductive capacity of P. elaeisis parasitizing pupae treated or not with botanical extracts of cerrado plants at 0.1 or 0.01% (w.w-1) in the laboratory of the Federal University of Viçosa in Viçosa, Minas Gerais State, Brazil. Ethanol extracts of *Bidens sulphurea* (flowers), *Vernonia aurea* (Asteraceae) (leaves), *Memora nodosa* (Bignoniaceae) (flowers) and three fractions (F1, F2 and F3) with different polarities of each extract were used. The control had only water or ethanol. The treatments consisted of females mated for five days + pupa untreated for two days + insecticide five days after removing the pupa (T1); female "T1" + pupa treated for two days + insecticide five days after removing the pupa (T2); females mated for five days + pupa treated for two days (T3); females "T3" + pupa treated for two days (T4); females mated for three days + pupa treated for two days + insecticide five days after removing the pupa (T5); females "T5" + pupa untreated for two days + insecticide five days after removing the pupa (T6); females mated for three days + pupa treated for two days (T7); females "T7" + pupa treated for two days (T8). Palmistichus elaeisis parasitized pupa treated with the extracts and fractions and parasitism of this insect mated for five days was higher compared to those with three days. The parasitism of P. elaeisis was higher in the first pupa offered than on the second one. Adults hatched from the first generation of P. elaeisis originated fertile offspring but hatching rate of the second generation of insects was higher compared to the first. Extracts and fractions of the Brazilian cerrado plants are selective to P. elaeisis and should be used for programs of integrated pest management with this insect